

GELASIMUS MACRODACTYLUS H. MILNE EDWARDS & LUCAS,
1843 (CRUSTACEA, DECAPODA): PROPOSED SUPPRESSION UNDER
THE PLENARY POWERS. Z.N.(S.) 1835

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The suppression of the specific name *macrodactylus* H. Milne Edwards & Lucas, 1843, as published in the combination *Gelasimus macrodactylus*, is requested here as this name has been applied in the literature to several distinct species, all of which are also known under other names, while the true identity of the species is doubtful. As the name *macrodactylus* is one of the oldest in the genus it forms a threat to some well established names.

2. In 1843 H. Milne Edwards & Lucas (in d'Orbigny's *Voy. Amér. Mérid.* 6 : 27) described the new species *Gelasimus macrodactylus* from "Côtes du Valparaiso", Chile. They gave a short description and two figures. From the same locality they described another new species of the same genus *G. stenodactylus*. The genus *Gelasimus* is now best known under the name *Uca*. Notwithstanding a thorough exploration of the Pacific coast of South America, in the present century no *Uca* species have so far been found south of the coast of central Peru, and it seems doubtful that conspicuous and easily noticeable species like those of *Uca* would have escaped the attention of zoologists looking specially for them. Apart from the records by H. Milne Edwards & Lucas, there is one other record of both species from Chile, viz., that by Porter (1913, *Bol. Mus. Nac. Hist. nat. Chile*, 5 : 313-318; 1917, *Rev. Chilena Hist. nat.*, 21 : 152-160), who in two practically identical papers reported the capture of both species in 1896 near Valparaiso, but at the time of writing this material was no longer available to him, and he evidently quoted from memory. The material of *Uca stenodactylus* was said by Porter to be given to the Valparaiso Museum (nothing was said by him in this respect of *U. macrodactylus*), but in Porter's own (1899) "Catálogo metódico provisional de las colecciones zoológicas. Museo de Historia natural de Valparaiso" (: 1-16) no *Uca* is mentioned among the Crustacea. Porter's records therefore seem highly dubious, the more so since later neither near Valparaiso, nor anywhere else in Chile have specimens of *Uca* been collected. For the same reason the correctness of the type localities of *Gelasimus macrodactylus* and *G. stenodactylus* must be severely doubted. Alcide d'Orbigny, who collected this type material during his voyage to South America, visited during this trip Brazil, Uruguay, Argentina, Chile, Bolivia, and Peru, so that a mix-up of labels may have occurred.

3. The Muséum National d'Histoire naturelle in Paris holds a dry specimen, which is labelled as the possible type of *Gelasimus macrodactylus*. The size of the specimen does not agree with the measurement given in the original description, so that we are not convinced that it really is a type specimen; of course it might be a syntype. The specimen proves to belong to *Uca rapax* (Smith, 1870), a species which is very common and widely distributed in the West

Indian region and on the Atlantic shores of the southern U.S.A., Central and South America.

4. The name *Uca macrodactylus* has been used for two West American species of *Uca*: *Uca galapagensis* Rathbun, 1902, which is known from the Galapagos Islands and Peru, and *Uca herradurensis* Bott, 1954, known from El Salvador and Costa Rica. In her monograph of the American Grapsoid crabs Rathbun (1918, *Bull. U.S. Nat. Mus.* 97 : 404, pl. 143) used the name *macrodactylus* for the latter species.

5. The original description by H. Milne Edwards & Lucas gives no information enabling one to decide definitely whether *U. macrodactylus* is identical with either *U. rapax*, *U. galapagensis*, or *U. herradurensis*. If the so-called type specimen in the Paris Museum indeed is the type of the species, the name *rapax* Smith, 1870, would have to disappear and be substituted by *macrodactylus*, a name never before used for that species. This change is highly undesirable as *Uca rapax* is a very well-known name for a common species, which has also formed the subject of many studies by physiologists, ecologists, and behaviourists. If *Uca macrodactylus* is identical with *U. galapagensis*, which in its distribution comes closest to the type locality of the former (although the nearest locality is still about 1,800 miles north of Valparaiso), then the unfortunate result would be that the nomenclature adopted in Rathbun's (1918) fundamental monograph, which has been followed by all subsequent authors, has to be changed in such a way that the name *macrodactylus* has to be switched from one species (*U. herradurensis*) to another (*U. galapagensis*). As these two species are rather closely related and inhabit the same general area (the East Pacific region), such a switch is apt to cause confusion. As *Uca herradurensis* shows least resemblance to the figures given by H. Milne Edwards & Lucas, and as to all appearances this species does not occur in any of the regions visited by d'Orbigny, it seems highly unlikely that *U. macrodactylus* be identical with that species.

6. In view of the uncertainties that exist in regard to the true identity of *Gelasimus macrodactylus*, and the confusion that will be the result if this name is applied to any of the species that might be identical with it, it seems best to suppress this doubtful name altogether so as to make the legal use of the unambiguous names *rapax*, *galapagensis*, and *herradurensis* possible.

7. The action that is now requested from the International Commission on Zoological Nomenclature is that they:

- (a) make use of their plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the specific name *macrodactylus* H. Milne Edwards & Lucas, 1843, as published in the combination *Gelasimus macrodactylus*; and
- (b) place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *macrodactylus* H. Milne Edwards & Lucas, 1843, as suppressed under (a) above.

No other actions are called for. The generic name *Uca* Leach, 1814, has already been placed on the Official List of Generic Names in Zoology (as name no. 1648) on a previous occasion (Opinion 712).